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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,747

11/25/2003

Charles E. Narad

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EXAMINER

CHRISTENSEN, SCOTT B

ART UNIT

PAPER NUMBER

2144

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/722,747	Applicant(s) NARAD, CHARLES E.	
	Examiner Scott Christensen	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/22/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in regards to the most recent papers filed on 12/31/2007.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10, 12-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher in US Patent 6,434,620, hereafter referred to as "Boucher" in view of "Introduction to the Remote Monitoring (RMON) family of MIB Modules" by Waldbusser, Cole, Kalbfleisch, and Romascanu, hereafter referred to as "Waldbusser."

With regard to claim 1, Boucher discloses a network interface comprising:

a direct memory access unit (Boucher: Column 8, lines 32-38); and

circuitry to:

receive and transmit network data (Boucher: Abstract);

maintain a set of statistics metering operation of the network interface

(Boucher: Column 44, lines 20-23), the set of statistics includes at least one selected

from the group of (1) a number of bytes received, and (2) a number of packets received

(Boucher: Column 56, lines 51-63); and

initiate a direct memory access transfer of the set of statistics in accordance (Boucher: Column 63, lines 17-43 and Column 56, lines 27-33).

Boucher does not disclose expressly that the circuitry initiates a direct memory access transfer of the set of statistics in accordance with the received data specifying the time interval.

However, Waldbusser discloses the Remote Monitoring family of MIB modules. The functions described in Waldbusser includes the `tpmAggregateReportsGroup`, which is used to provide the collection of aggregated statistical measurements for the configured report intervals (Waldbusser: Page 16, Section 4.11, “The `tpmAggregateReportsGroup`”). Further, the statistics are over an interval specified by the management station (Waldbusser: Page 7, paragraph 2).

It would have been obvious to combine Waldbusser with the disclosure of Boucher.

The suggestion/motivation for doing so would have been that statistical information on the network interface of Boucher could be collected automatically at certain intervals configured by the management station. This allows a program or user monitoring the interface to receive recent statistics without requiring that the user refresh the statistics report manually.

With regard to claim 2, Boucher discloses that the set of statistics comprises each of the following: a number of packets received by the interface, a number of bytes

received by the interface, a number of packets transmitted by the interface, and a number of bytes transmitted by the interface (Boucher: Column 56, lines 51-63).

With regard to claim 3, Boucher discloses that the circuitry comprises circuitry to include a timestamp with the direct memory access transfer of the set of statistics, the timestamp indicating a time at which the set of statistics were captured (Boucher: Column 67, lines 13-26).

With regard to claim 4, Boucher discloses that the circuitry to include a sequence count with the direct memory access transfer of the at least one statistic (Boucher: Column 57, lines 6-12).

Boucher does not disclose expressly that the sequence count sequentially numbering successively DMA-ed sets of the statistics.

However, it would have been obvious to have the sequence count sequentially numbering successively DMA-ed sets of the statistics.

The suggestion/motivation for doing so would have been that counters typically sequentially number the events that the counter is associated with. Therefore, a person of ordinary skill in the art would most likely have used sequential numbers to count the transfer of the DMA transmissions of the statistics.

With regard to claim 5, Boucher discloses the invention as substantially claimed except that the set of statistics comprises multiple RMON (Remote Monitoring) statistics.

However, Waldbusser discloses RMON, and the collection of statistics within RMON (Waldbusser: Page 3, section 3).

It would have been obvious to combine the teachings of Waldbusser with the combination of Waldbusser and Boucher.

The suggestion/motivation for doing so would have been RMON, as in Waldbusser, allows for monitoring devices to be utilized to remotely monitor a network. Any statistic that is collected within the RMON framework would result in the statistic being an RMON statistic as claimed.

With regard to claim 6, Boucher discloses that the circuitry comprises circuitry to initiate direct memory access transfer of received network data (Boucher: Column 8, lines 30-37).

With regard to claim 7, Boucher discloses that the network interface comprises a framer (Boucher: Column 56, lines 18-26).

With regard claim 8, Boucher discloses that the network interface comprises a Media Access Controller (MAC) (Boucher: Figure 21, MAC-A to MAC-D).

With regard to claim 9, Boucher discloses that the network interface comprises a PHY (Boucher: Column 77, lines 6-15).

With regard to claim 10, Boucher discloses circuitry to configure the circuitry to initiate direct memory access transfer (Boucher: Column 60, lines 53-59).

With regard to claim 12, Boucher discloses that the circuitry to configure comprises at least one register (Boucher: Column 56, lines 27-33).

With regard to claim 13, Boucher discloses that the circuitry to configure comprises circuitry to determine configuration information from received packets (Boucher: Column 21, line 64 to Column 22, line 10).

With regard to claim 14, Boucher discloses that the circuitry to determine configuration information from received packets comprises circuitry to intercept packets traveling along a transmit path (Boucher: Column 36, lines 14-20).

With regard to claim 15, Boucher discloses that the direct memory access unit comprises circuitry to notify a processor of completion of the transfer (Boucher: Column 90, line 64 to column 91, line 12).

With regard to 16, the invention claimed is substantially similar to that claimed in claim 1, and is rejected for substantially similar reasons.

With regard to claims 17-21, the instant claims include limitations that are substantially similar to limitations claimed in claims 6, 5, 4, 7, and 10, respectively, and are rejected for substantially similar reasons.

With regard to claim 22, Boucher discloses that the configuring comprises identifying at least one memory location to receive transferred data (Boucher: Column 84, lines 52-61. It is noted that Direct Memory Access involves performing read/write operations directly from/to memory locations. Therefore, to perform a write operation in DMA, a memory location must be identified to receive the data.).

With regard to claim 23, Boucher discloses, receiving a packet at the network interface (Boucher: Column 1, lines 40-42); and that the configuring comprises configuring based on data included in the packet (Boucher: Column 21, line 64 to Column 22, line 10).

With regard to claim 24, Boucher discloses that the transferring into the memory comprises transferring into a cache memory of at least one of the at least one processors (Boucher: Column 61, lines 14-30).

With regard to claim 25, the instant claim includes limitations that are substantially similar to limitations found in claim 15, and is rejected for substantially similar reasons.

With regard to claim 26, the instant claim is substantially similar to claim 1, and is rejected for substantially similar reasons.

With regard to claims 27-33, the instant claims include limitations that are substantially similar to limitations found in claims 6, 5, 4, 10, 22, 23, and 15, respectively, and are rejected for substantially similar reasons.

With regard to claim 34, the instant claim is substantially similar to claim 5 (and claim 1, from which claim 5 depends), and is rejected for substantially similar reasons.

With regard to claims 35-38, the instant claims include limitations that are substantially similar to limitations found in claims 10, 13, 27, and 4, respectively, and are rejected for substantially similar reasons.

Response to Arguments

4. Applicant's arguments filed 12/31/2007 have been fully considered but they are not persuasive.

Applicant argues on pages 10-11 of Applicant's arguments that the combination of Boucher and Waldbusser does not disclose "a time interval to perform a direct memory access transfer." Applicant states "the time period that the statistical data represents is different than the mechanism (e.g. Boucher's UPR request) used to deliver the data." Examiner agrees with this assertion. However, the rejection was based on the idea that the information is transmitted within the teachings of Waldbusser, and the time period that the statistical data was collected over is representative of the time period for transmission, as the data is transmitted after it is collected.

Further, Waldbusser discloses an offline operation mode, where the transfer occurs when an exceptional condition occurs (Waldbusser: Page 3, paragraph 4), which also meets the claim limitation, as "data specifying a time interval" only requires that the data somehow specifies when a time interval for the transfer to occur. For example, an exceptional condition occurs, the time interval would be from immediately to a the time that the data transfer is complete. There is no requirement that this transfer is periodically or that a start time and end time is specified, and the transfer only occurs between those two times, only that some time interval is specified by the data.

Thus, after careful consideration of Applicant's argument, the rejection under 35 USC 103 has been maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Christensen whose telephone number is (571)270-1144. The examiner can normally be reached on Monday through Thursday 6:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. C./
Examiner, Art Unit 2144
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2144